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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,289	06/18/2001	Kirk D. Brannock	042390.P11184	3916

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R. Alan Burnett
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

EXAMINER

OSMAN, RAMY M

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/884,289	BRANNOCK, KIRK D.	
	Examiner	Art Unit	
	Ramy M Osman	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10,13,14 and 17-30 is/are rejected.
- 7) ☒ Claim(s) 11,12,15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because line 13 is unclear. "... by simple updating the portion..." should be changed to "by simply updating ..." or to "simple updating of the ...".

Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities:

On page 1 line 13, change "contains" to "contained".

On page 4 line 20, change "thatis" to "that is".

On page 4 lines 16-23 there is no mention as to which figure is being referred to.

On page 6 line 13, change "simple" to "simply".

Page 13 lines 20-23 should be rewritten to correct overlapping words.

Appropriate correction is required.

Claim Objections

3. Claims objected to because of the following informalities:

Claim 7 line 4, change " ," to " ;".

Claim 7 line 6, remove the word "and".

Claims 11 & 15 line 2, insert a comma for better reading of the claim: "firmware, access".

Claim 17 line 12, indent the sentence for consistency with other limitations.

Appropriate correction is required.

4. Claim20 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to alternative claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

5. A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n). Claims 29 and 30 depend on dependent claim 19 but are mentioned after independent claims 22 and 26.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1-7,9,17-19,21-24 and 26-29 rejected under 35 U.S.C. 102(a) as being anticipated by Ha (US Patent No 6,175,919).

8. In reference to claims 1,9,17,22,24,26 and 29, Ha teaches a method comprising:

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loading platform firmware during a pre-boot phase of a computer system by,

executing a first portion of platform firmware code that is stored locally in the computer system; retrieving a second portion of platform firmware code from a remote firmware storage device; and executing the second portion of platform firmware code (Summary, column 3 lines 45-65, column 4 lines 5-20 & 40-55, column 5 lines 5-25 and claims 1-3).

9. In reference to claim 2,23 and 28, Ha teaches the method of claim 1, wherein execution of the first portion of platform firmware code performs the functions of:

initializing a processor chipset and system memory; initializing a network interface; and establishing a network communication link with a network server via which the remote firmware storage device may be accessed (column 5 lines 1-15; the limitations of this claim are inherent in Power-On-Self-Test)

10. In reference to claim 3, Ha teaches the method of claim 2, wherein execution of the first portion of platform firmware code further performs the function of requesting the network firmware server to send a particular set of platform firmware code corresponding to the second portion of platform firmware code that is stored in a firmware file on the remote firmware storage device over the network communication link to the computer system (column 4 lines 54-67, column 5 lines 1-20 and claims 1-3).

11. In reference to claims 4-6, Ha teaches the method of claim 3, further comprising determining a location of the firmware file on the remote firmware storage device;

wherein the location of the firmware file is determined by: passing platform identification information to the network server, and determining the location of the firmware file based on the

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platform identification information passed to the network server; (column 4 lines 54-67, column 5 lines 1-20 and claims 1-3) and

wherein the platform identification information comprises one of a processor identification code corresponding to a processor for the computer system or a model number for the computer system. (column 4 lines 54-67, column 5 lines 1-20 and claims 1-3)

12. In reference to claim 7, Ha teaches the method of claim 3, further comprising:

creating configuration information that maps a pointer to an appropriate set of platform firmware code for the computer system with a network identifier for the computer system;

sending a message to the network server requesting the network server to send back the appropriate set of platform firmware code;

extracting the network identifier from the message sent to the network server; and

locating the appropriate set of platform firmware code via the pointer. column 4 lines 54-67, column 5 lines 1-20 and claims 1-3; the limitations of this claim are inherent in sending a message to a host/server).

13. In reference to claims 18 and 27, Ha teaches the method of claims 17 and 26 above, wherein the first portion of platform code is stored in a rewritable memory device operatively coupled to a primary processor for the computer system and updating the platform firmware code comprises rewriting the rewritable memory device; flash ROM component (column 3 lines 55-65).

14. In reference to claim 19, Ha teaches the method of claim 17, further comprising determining whether or not an existing set of platform firmware code needs to be updated and

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updating the existing set of platform firmware code if it is determined the existing set of platform firmware code needs to be updated (column 4 lines 46-50).

15. In reference to claim 21, it is well known in the art where firmware is stored in a CMOS memory in which computer configuration information is stored.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 8,10,13,14,25 and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Ha (US Patent No 6,175,919) in view of Rasmussen (US Patent No 6,640,334).

18. In reference to claim 8, Ha teaches the method of claim 2 above. Ha fails to explicitly teach wherein the network firmware server is accessed via an Internet-based network communication link, further comprising: storing network location information address corresponding to the network firmware server on a local storage device; and using the network location information to access the network firmware server. However, Rasmussen teaches accessing server over the internet for firmware updating (column 1 lines 5-25 and column 3 lines 1-5). It is inherent in Ramussen that server address would be stored locally and used to access the server.

It would have been obvious for one of ordinary skill in the art to modify Ha by accessing server over the internet as per the teachings of Ramussen for the purpose of firmware updating.

19. In reference to claims 10,25 and 30, Ha teaches the method of claim 9 above. Ha fails to explicitly teach wherein the second portion of platform firmware code is stored in a firmware volume (FV), and execution of the driver publishes an FV interface protocol instance that informs the pre-boot phase service that it can access the second portion of platform firmware code via the driver. However, Rasmussen teaches a second portion of firmware code is stored in a buffer volume thus triggering execution of the second portion for the purpose of remotely updating firmware (Abstract and column 3 line 45 – column 4 line 20).

It would have been obvious for one of ordinary skill in the art to modify Ha by making the second portion of firmware code stored in a buffer volume thus triggering execution of the second portion as per the teachings of Rasmussen for the purpose of remotely updating firmware.

20. In reference to claims 13 and 14, Ha teaches the method as recited in claim 1 above. Ha fails to explicitly teach a firmware volume comprising a storage device in which a second portion of platform firmware is stored; and wherein execution of the driver publishes an FV interface protocol instance that informs a pre-boot phase service that it can access the second portion of platform firmware code via the driver. However, Rasmussen teaches a second portion of firmware code is stored in a buffer volume thus triggering execution of the second portion for the purpose of remotely updating firmware (Abstract and column 3 line 45 – column 4 line 20).

It would have been obvious for one of ordinary skill in the art to modify Ha by making the second portion of firmware code stored in a buffer volume thus triggering execution of the second portion as per the teachings of Rasmussen for the purpose of remotely updating firmware.

Allowable Subject Matter

21. Claims 11,12,15 and 16 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

22. The following is a statement of reasons for the indication of allowable subject matter:

The below indicated limitations if written into their independent claims would render the claims patentable over the cited art due to the novelty of the subject matter:

- interface protocol instance comprises a software abstraction that enables consumers of firmware access to the firmware volume without requiring those consumers to know where or how the firmware code is stored in the firmware volume

- interface protocol instance corresponding to a first firmware volume, further comprising:

- loading and executing the first portion of the second portion of firmware code, thereby causing a second driver to be loaded that publishes a second FV interface protocol instance that enables access to a second firmware volume; and

- retrieving a second portion of the second portion of firmware code from the second firmware volume via the second FV interface protocol instance.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M Osman whose telephone number is (703) 305-8050.

The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703) 308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMO

September 27, 2004


ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100